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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/937,719	01/03/2002	Toshiaki Takenaka	43890-542	5526

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WASHINGTON, DC 20005-3096

EXAMINER

FUNK, STEPHEN R

ART UNIT	PAPER NUMBER
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2854

DATE MAILED: 01/30/2003

7

Please find below and/or attached an Office communication concerning this application or proceeding.

# Office Action Summary

Application No.

09/937,719

Applicant(s)

Takenaka et al.

Examiner

Stephen Funk

Art Unit

2854



-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

## Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136 (a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

## Status

- 1) ☐ Responsive to communication(s) filed on \_\_\_\_\_
- 2a) ☐ This action is FINAL. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11; 453 O.G. 213.

## Disposition of Claims

- 4) ☒ Claim(s) 1-20 is/are pending in the application.
- 4a) Of the above, claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-20 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claims \_\_\_\_\_ are subject to restriction and/or election requirement.

## Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on Jan 3, 2002 is/are a) ☐ accepted or b) ☒ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on \_\_\_\_\_ is: a) ☐ approved b) ☐ disapproved by the Examiner.  
If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

## Priority under 35 U.S.C. §§ 119 and 120

- 13) ☒ Acknowledgement is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).  
a) ☒ All b) ☐ Some\* c) ☐ None of:  
1. ☐ Certified copies of the priority documents have been received.  
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_  
3. ☒ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).  
\*See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgement is made of a claim for domestic priority under 35 U.S.C. § 119(e).  
a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgement is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

## Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892) 4) ☐ Interview Summary (PTO-413) Paper No(s). \_\_\_\_\_
- 2) ☒ Notice of Draftsperson's Patent Drawing Review (PTO-948) 5) ☐ Notice of Informal Patent Application (PTO-152)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449) Paper No(s). 6 6) ☐ Other: \_\_\_\_\_

The disclosure is objected to because of the following informalities: On page 3 line 9 "an" should be --a-- and on page 8 line 4 "steel" is misspelled. In claims 6, 11, 13, 14, and 18 --a-- should be inserted before "squeegee" where appropriate. Appropriate correction is required.

The use of the trademark TEFLON has been noted in this application on page 16 line 5. All letters of the mark should be capitalized wherever it appears and be accompanied by the generic terminology.

Although the use of trademarks is permissible in patent applications, the proprietary nature of the marks should be respected and every effort made to prevent their use in any manner which might adversely affect their validity as trademarks.

The drawings are objected to because Figures 8 - 11 should be labeled as --Prior Art--. (It is noted that the key to the reference numerals on the ninth sheet of the drawings will not be published with the drawings). A proposed drawing correction or corrected drawings are required in reply to the Office action to avoid abandonment of the application. The objection to the drawings will not be held in abeyance.

Claims 8, 11, and 12 are objected to under 37 C.F.R. 1.75(a) as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

In claim 8 line 3 the phrase "and the like" renders the claim indefinite because the claim includes elements not actually disclosed (those encompassed by "and the like"), thereby rendering the scope of the claim unascertainable. See MPEP § 2173.05(d).

In each of claims 11 and 12 "said slanting area" lacks proper antecedent basis.

Claims 11, 12, and 20 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

In each of claims 11 and 12 the recitations of comparing the paste member to a dimension of an inferentially recited squeegee renders the scope of the claims indefinite. A direct comparison of a claimed element to a non-claimed element does not adequately set forth the metes and bounds of the claims.

In claim 20 the disposition of the paste removing member with respect to a squeegee renders the scope of the claim indefinite for the same reasons stated directly above.

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless -

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 1, 3, 4, 6, 9, 14, and 15 are rejected under 35 U.S.C. 102(b) as being anticipated by Hamada et al. (JP 10-193,565). Hamada et al. teach a mask (S) and a plate framework (11)

wherein a non-opening area of the mask functions as a paste removing member for removing paste from squeegee (8). See Figures 3(a)-(d) of Hamada et al.

Claims 5, 16, 18, and 20 are rejected under 35 U.S.C. 103(a) as being unpatentable over Hamada et al. With respect to claims 5, 18, and 20 Hamada et al. show both forward and backward moving squeegees (8). See Figure 2 of Hamada et al. It would have been obvious to one of ordinary skill in the art to utilize the non-opening area on both sides of the mask (S) to remove paste off of both the forward and backward squeegees. With respect to claim 16 either type of paste is conventional in the art.

Claim 17 is rejected under 35 U.S.C. 103(a) as being unpatentable over Hamada et al. in view of applicant's admission of prior art. Applicant discloses in prior art Figures 8(a)-(f) the conventionality of mask films (22a, 22b) and through hole (23) on a board (21). It would have been obvious to one of ordinary skill in the art to provide the method of Hamada et al. with the step of utilizing the conventional board of prior art Figure 8 so as to prevent the surface of the board from being contaminated.

Claim 19 is rejected under 35 U.S.C. 103(a) as being unpatentable over Hamada et al. in view of Hirai et al. (US 5,840,432). Hirai et al. teach the composition of the paste as recited. See Example 7 in column 12 of Hirai et al. It would have been obvious to one of ordinary skill in the art to provide the method of Hamada et al. with the paste of Hirai et al. to achieve the benefits expected from using a solvent free paste.

Claims 1 - 4, 6, 11, 13, and 20 are rejected under 35 U.S.C. 102(b) as being anticipated by Kashio (JP 62-292,435). Kashio teaches a mask (4) having a plate framework and a "paste

removing member" (18). See Figures 1 - 3 of Kashio. Insofar as the structure disclosed by applicant is a paste removing member so would the structure (18) disclosed by Kashio. Note the slanting area and flat area of the member in Figure 2.

Claims 7 - 10 are rejected under 35 U.S.C. 103(a) as being unpatentable over Kashio. With respect to claim 7 it would have been obvious to one of ordinary skill in the art to provide the paste removing member as an integral one-piece structure with the framework to simplify the manufacturing and assembly process. With respect to claim 8 it would have been obvious to one of ordinary skill in the art to provide resin between the paste removing member and the framework to simply prevent leaking of the paste. With respect to claims 9 and 10 it would have been obvious to one of ordinary skill in the art to provide the paste removing member with a smooth surface to ease in cleaning ink therefrom.

Claim 17 is rejected under 35 U.S.C. 103(a) as being unpatentable over Kashio in view of applicant's admission of prior art. Applicant discloses in prior art Figures 8(a)-(f) the conventionality of mask films (22a, 22b) and through hole (23) on a board (21). It would have been obvious to one of ordinary skill in the art to provide the method of Kashio with the step of utilizing the conventional board of prior art Figure 8 so as to prevent the surface of the board from being contaminated.

Claim 19 is rejected under 35 U.S.C. 103(a) as being unpatentable over Kashio in view of Hirai et al. (US 5,840,432). Hirai et al. teach the composition of the paste as recited. See Example 7 in column 12 of Hirai et al. It would have been obvious to one of ordinary skill in the

art to provide the method of Kashio with the paste of Hirai et al. to achieve the benefits expected from using a solvent free paste.

Claims 1, 2, 12, and 14 are rejected under 35 U.S.C. 102(b) as being anticipated by Erdmann (US 5,044,306). Erdmann teaches a mask (S), a plate framework (6), and a paste removing member (24). With respect to claim 12 note that the angle of the slanting area (66) is almost the same as the angle of the squeegee. See Figures 5 - 7, in particular, Figure 6 of Erdmann.

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

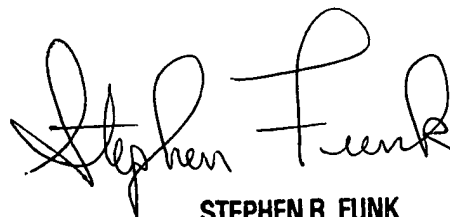
Any inquiry concerning this communication or earlier communications from the examiner should be directed to Stephen Funk at telephone number (703) 308-0982. The examiner can normally be reached Monday - Friday, except Wednesdays, from 7:00 am to 5:30 pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Drew Hirshfeld, can be reached at (703) 305-6619.

The fax number for *official* papers is (703) 308-7722, 7724. The fax number for those wishing an auto-reply verifying receipt of *official* papers is (703) 872-9318 or for After-Final actions is (703) 872-9319. Upon consulting with the examiner *unofficial* papers only may be faxed directly to the examiner.

Any inquiry of a general nature or relating to the status of this application should be directed to the Group receptionist at telephone number (703) 308-0956.

Stephen Funk  
January 24, 2003



**STEPHEN R. FUNK**  
**PRIMARY EXAMINER**